

APPLICATION
FOR
UNITED STATES LETTERS PATENT

TITLE: CHILDREN'S CLIMBING PLAYSETS

APPLICANT: BARRETT W. BROWN

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EV304818045US

December 29, 2003
Date of Deposit

Children's Climbing Playsets

TECHNICAL FIELD

This invention relates to climbing playsets for children.

BACKGROUND

5 Play areas for children, such as backyards and community playgrounds, often include playsets (sometimes referred to as "jungle gyms") that are designed to allow children to climb and may also include other play items such as a swing and/or a slide. Such playsets are in some cases made of a wood that is suitable for exposure to the weather, for example cedar or treated lumber. In designing such playsets, ensuring the safety of children of different ages is of paramount importance. Other important considerations are adaptability of the playset to children
10 of different ages, climbing abilities, and interests, and cost of manufacture and shipping.

SUMMARY

In one aspect, the present invention features a children's playset that includes a multi-level structure, and a plurality of steps configured to allow a child to climb from a first level of the structure to a second level of the structure, the steps being mounted within the multi-level
15 structure so that they are removable without damaging the structure.

The playset may also include removable upright members to which the steps are attached. The steps may be removably attached to the removable upright members. The playset may also include a horizontally mounted member configured to removably receive an upper portion of the removable upright members. In this case, the upper portion of the removable upright members
20 may be notched, and the horizontally mounted member may be configured to be received in the notched portions of the removable upright members. The playset may also include a plurality of climbing rungs that extend substantially horizontally between at least one pair of adjacent upright members. The climbing rungs may extend between two adjacent pairs of upright members, defining a pair of ladders at an outer corner of the playset. The first level may be at
25 ground level, or may be an upper level.

The playset may be configured so that removal of the steps leaves an open play area within the first level. The steps are preferably mounted so as to be removable from the playset at any time during the life of the playset.

The invention also features methods of using the playsets described above.

Preferred playsets include stair steps that can be easily installed and removed, allowing the playset to be customized by a user, and adapted to meet the changing needs of growing children. The steps can be removed without compromising the structural integrity of the playset, or damaging the steps or playset. If desired, the steps can be repeatedly installed and removed in the same playset or multiple playsets of similar construction.

In preferred playsets, when the stair steps are removed, the lower level of the playset is substantially entirely open, providing more space for children to play, and more options for customization of the playset.

The steps may be large enough to accommodate the entire body of a child, e.g., a child having a height of up to 36 inches. Steps of this size allow a child to place his or her hands and knees on the step simultaneously, prior to climbing to the next step. This feature allows small children, who would typically be unable to claim conventional stairs, to safely climb and descend. In some preferred playsets, each step is surrounded on four sides by upright members, making it unlikely that a child will fall from the step while climbing and providing the child with a sense of security. Moreover, the steps, unlike conventional stairs or ladders, are completely enclosed by the playset, and do not require an opening in the upper level of the playset from which a child could accidentally fall.

The details of one or more embodiments of the invention are set forth in the accompanying drawings and the description below. Other features and advantages of the invention will be apparent from the description and drawings, and from the claims.

DESCRIPTION OF DRAWINGS

Fig. 1 is a perspective view of a playset according to one embodiment of the invention. Fig. 1A is similar to Fig. 1, but shows the removable stair steps of the playset removed to leave the lower level of the playset open.

Fig. 2 is a perspective view of a portion of the playset.

Fig. 3 is a perspective view of the portion of the playset shown in Fig. 2, taken from a different angle.

Fig. 4 is an exploded view of the upper left hand portion of Fig. 3.

Fig. 5 is a perspective view of a step used in the playset shown in Fig. 1.

Fig. 6 is an enlarged detail perspective view of an upper portion of a removable upright member used in the playset shown in Fig. 1.

DETAILED DESCRIPTION

Referring to Fig. 1, a playset 10 includes a lower level 12, an upper level 14, and a roof 16. Upper level 14 includes a deck 15. The playset is constructed of a plurality of permanent upright members 18. The upright members 18 are joined at their bases by horizontal frame members 20, and at the top of the upper level by horizontal frame members 22. The upright and horizontal frame members define walls that are substantially open, i.e., that are not sided or otherwise covered.

Climbing rungs 26 are provided to allow a child to climb from the lower level 12 to the upper level 14, while also contributing to the racking strength of the playset. These climbing rungs may not be suitable for use by a small child or a child whose upper body strength is not yet well developed. As a result, stair steps 28 (shown in detail in Figs. 2 and 3) are mounted within the lower level 12 to give children an alternative, easier climbing option.

As shown in Fig. 2, stair steps 28 are supported by permanent upright members 18 on their outer corners, and by removable uprights 30 on their inner corners that are positioned within the lower level 12. Thus, the stair steps are surrounded at their four corners by upright members, providing enhanced safety during climbing. Stair steps 28 are preferably large enough to accommodate the entire body of a small child. For example, a preferred stair step may be at least about 19.75 inches wide and at least about 22 inches long.

Referring to Fig. 3, the removable uprights 30 are removable because they are mounted within the playset by engagement of a groove 32 in the upper surface 34 of upright 30 with a dowel 36. Dowel 36 is positioned immediately beneath the deck 15 of the upper level 14, so as not to interfere with the headroom in the lower level 12 or create an entrapment hazard. Dowel 36 extends the width of the playset, and is supported at each of its ends by a permanent upright member 18 in which it is fixedly mounted.

If the playset is to be used by children who are comfortable climbing on climbing rungs 26, it may be desirable to remove stair steps 28. Referring to Fig. 2, stair steps 28 are easily removable, simply by removing the bolts or lag screws 40 that attach the stair step to the uprights at each of its four corners, and removing uprights 30.

Because uprights 30 are removable, removal of stair steps 28 will result in the lower level 12 being entirely open, as shown in Fig. 1A. Advantageously, this allows the lower level to be used for play and, if desired, equipped with a picnic table or sand box, or other items such as toys or games. Moreover, if the playset is being initially sold to a purchaser who does not desire the stair step option, the playset can be supplied without stair steps, resulting in a cost saving to the purchaser. If the purchaser's needs change, or if a later owner of the playset wishes to install stair steps, the stair steps can be easily installed at any time.

Referring to Fig. 5, each stair step 28 preferably includes decking 42 and support members 44. Support members 44 include drilled holes 46 that are dimensioned to receive bolts/screws 40.

A number of embodiments of the invention have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of the invention.

For example, while the playset has been shown as having three stair steps, any desired number can be used. Similarly, stair steps may be provided in more than one corner of the playset, if desired. Moreover, while the playset has been shown as having a generally square shape, the playset may have any desired geometry. For example, all or a portion of the playset may be in the form of a round or polygonal gazebo.

Accordingly, other embodiments are within the scope of the following claims.